DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-007886 Address: 333 Burma Road Date Inspected: 21-Jul-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Zhao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** and Tower COMPONENT

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

BAY #6

This QA Inspector randomly observed ZPMC welding personnel performing fillet welding of weld joint WD1-A305-77M-3-12&13 filler passes at Tower Strut Assembly. The personnel were observed welding in the 3F position utilizing a SMAW process. Welder is identified as 066268. The welding variables recorded by QC appeared to comply with the WPS-B-T-2113

This QA Inspector randomly observed ZPMC welding personnel performing fillet welding of weld joint WD1-A305-77M-3-58&59 filler passes at Tower Strut Assembly. The personnel were observed welding in the 3F position utilizing a SMAW process. Welder is identified as 068918. The welding variables recorded by QC appeared to comply with the WPS- B – T-2113

This QA Inspector randomly observed ZPMC welding personnel performing fillet welding of weld joint WD1-A305-65M-2-18&19 filler passes at Tower Strut Assembly. The personnel were observed welding in the 2F position utilizing a SMAW process. Welder is identified as 066481. The welding variables recorded by QC appeared to comply with the WPS- B – T-2112

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This QA Inspector randomly observed ZPMC welding personnel performing groove welding of weld joint SP-3011-001-077&078 filler passes at Side Plate. The personnel were observed welding in the 3G position utilizing a FCAW process. Welder is identified as 053609. The welding variables recorded by QC appeared to comply with the WPS- B – T-2233-B-U2-F.

BAY #3

This QA Inspector randomly observed ZPMC welding personnel performing groove welding of weld joint SSD-PP102-136&137 filler passes at OBG FB assembly. The personnel were observed welding in the 3G position utilizing a FCAW process. Welder is identified as 044830. The welding variables recorded by QC appeared to comply with the WPS- B – T-2233-Tc-U4b-F.

Magnetic Particle Testing

This Quality Insurance Inspector (QA) performed 15% verification Magnetic Particle Testing (MT) for OBG Floor Beam & Corner Assembly Diaphragm. This weld was previously tested and accepted by ZPMC QC MT technicians.

The weld designations reviewed are as follows:

OBG COMPONENT

CORNER ASSEMBLY DIAPHRAGM

CSD4-PP092-095~105

CSD4-PP094-095~105

CSD4-PP088-095~105

CSD4-PP086-095~105

CSD5-PP087-095~105

CSD5-PP093-095~105

CSD6-PP089-095~100

CSD6-PP091-095~100

CSD6-PP090-095~100

CSD5-PP089-033~038

CSD5-PP091-033~038

CSD7-PP090-033~038

FLOOR BEAM

FB003-190-035,036,047&048 FB003-194-035,036,047&048

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Ultrasonic Testing (UT)

This QA Inspector performed Ultrasonic testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as Floor Beam, Corner Beam and Side Plate CJP weld.

The Weld Designations are as follow

Floor Beam

FB009-030-045

FB024-008-127

FB024-008-125

FB024-008-126

FB009-031-043

Corner Beam

CB202F-009-001&002

Side Plate

SP3012-001-020

SP3045-001-020

Visual Inspection For Green Tagging

This QA inspector performed Visual Inspection for Floor Beam & Corner Assembly Diaphragm ,which were previously accepted by ZPMC Quality Control personnel and ABF QA personnel.

The members are identified as

OBG COMPONENT

Floor Beam No. Green Tagging No.

FB003-190 009678

FB003-194 009677

DIAPHRAGM No. Green Tagging No.

CSD4-PP092 009899

CSD4-PP094 009900

CSD4-PP088 009898

CSD4-PP086 009897

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CSD5-PP087	009904
CSD5-PP093	009903
CSD6-PP089	009905
CSD6-PP091	009907
CSD6-PP090	009906
CSD5-PP089	009902
CSD5-PP091	009901
CSD7-PP090	009908

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Bera, Subhasis	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer